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NOTICE OF ALLOWANCE AND FEE(S) DUE

27045 7590 09/08/2010

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

EXAMINER

PHAM, TIMOTHY X

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 09/08/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,877

05/17/2006

Justus Petersson

P18221-US1

8392

TITLE OF INVENTION: ARRANGEMENT AND METHOD FOR DETERMINING CHARGING IN A TELECOMMUNICATIONS SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/08/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

27045 7590 09/08/2010

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,877	05/17/2006	Justus Petersson	P18221-US1	8392

TITLE OF INVENTION: ARRANGEMENT AND METHOD FOR DETERMINING CHARGING IN A TELECOMMUNICATIONS SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/08/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
PHAM, TIMOTHY X	2617	455-406000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,877	05/17/2006	Justus Petersson	P18221-US1	8392
27045	7590	09/08/2010	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			PHAM, TIMOTHY X	
			ART UNIT	PAPER NUMBER
			2617	
DATE MAILED: 09/08/2010				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 631 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 631 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)	
	10/595,877	PETERSSON ET AL.	
	Examiner	Art Unit	
	TIMOTHY PHAM	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to June 30, 2010.
2. ☒ The allowed claim(s) is/are 1-10, 12-18 and 20-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|---|---|

/AJIT PATEL/
Primary Examiner, Art Unit 2617

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Han on September 1, 2010.

Claims:

- Claims 8 and 19 have been cancelled without prejudice.
- The claims 1 and 12 are amended.

Listing of Claims:

1. (Currently Amended) A method for determining a charging rate related to a data bit transfer session for a mobile client communicating with a radio resource managing unit comprising the steps of:

dynamically determining a bandwidth on the wireless communication link available to and allowed to be used by the bit transfer session for said mobile client;

a charging logic receiving information from the radio resource managing unit about the bandwidth on the wireless communication link that the bit transfer session is available to use; and said charging logic applying a particular charging rate for said mobile client based on said received bandwidth information for said data bit transfer session wherein the charging logic adapting the charging rate related to the bit transfer session such that the session is charged according to a first charging rate associated with

a first charging class when the bandwidth on the wireless link available to the bit transfer session is within a first predetermined interval and according to a second charging rate associated with a second charging class when the bandwidth on the wireless link available to the bit transfer session is within a second predetermined interval.

2. (Previously Presented) The method for determining said charging rate according to claim 1 further comprising The charging logic receiving said information from the radio resource managing unit each time the bandwidth on the wireless link available to the bit transfer session has changed.

3. (Previously Presented) The method for determining said charging rate according to claim 1 further comprising the charging logic receiving said information from the radio resource managing unit at predetermined intervals.

4. (Previously Presented) The method for .determining said charging rate according to claim 1 further comprising the charging logic receiving said information from the radio resource managing unit each time the bandwidth on the wireless link available to the bit transfer session has changed and the bandwidth change has been applied to the session for a predetermined period of time.

5. (Previously Presented) The method for determining said charging rate according to claim 1 further comprising the charging logic receiving said information from the radio resource managing unit at intervals which depend on a service type of the bit transfer session.

6. (Previously Presented) The method for determining said charging rate according to claim 1 further comprising the charging logic receiving said information from the radio

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resource managing unit via an application server which relays said information from the radio resource managing unit to the charging logic.

7. (Previously Presented) The method for determining said charging rate according to claim 1 further comprising the charging logic receiving said information from the radio resource managing unit via a mobile proxy which relays said information from the radio resource managing unit to the charging logic.

8. (Canceled)

9. (Previously Presented) The method for determining said charging rate according to claim 1 further comprising the charging logic determining that the charging rate related to the bit transfer session should be zero when the bandwidth on the wireless link available to the bit transfer session is below a predetermined threshold level.

10. (Previously Presented) The method for determining said charging rate according to claim 1 further comprising the charging logic adapting the charging rate related to the bit transfer session based on said received information from the radio resource managing unit such that the impact of said received information from the radio resource managing unit on the charging rate of the bit transfer session depends on a service type of the bit transfer session.

11. (Canceled)

12. (Currently Amended) A telecommunications charging system associated with a mobile client communicating with a radio resource managing unit over a wireless communication link within a telecommunication network system, comprising:

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means for dynamically determining a bandwidth available for and allowed to be used by a particular data bit transfer session established between said mobile client and said radio resource managing unit over said wireless communication link;

reception means for receiving information from the radio resource managing unit about the bandwidth on the wireless link available for the bit transfer session; and

charging server for applying a particular charging rate for said mobile client based on said received bandwidth information for the bit transfer session wherein the charging server is arranged to adapt the charging rate related to the bit transfer session such that the session is charged according to a first charging rate associated with a first charging class when the bandwidth on the wireless link available to the bit transfer session is within a first predetermined interval and according to a second charging rate associated with a second charging class when the bandwidth on the wireless link available to the bit transfer session is within a second predetermined interval.

13. (Previously Presented) The telecommunication charging system according to claim 12, wherein said reception means is arranged to receive said information from the radio resource managing unit each time the bandwidth on the wireless link that the bit transfer session is available to use has changed.

14. (Previously Presented) The telecommunication charging system according to claim 12, wherein said reception means is arranged to receive said information from the radio resource managing unit at predetermined intervals.

15. (Previously Presented) The telecommunication charging system according to claim 12, wherein said reception means is arranged to receive said information from the radio

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resource managing unit each time the bandwidth on the wireless link available to the bit transfer session has changed and the bandwidth change has been applied to the session for a predetermined period of time.

16. (Previously Presented) The telecommunication charging system according to claim 12, wherein said reception means is arranged to receive said information from the radio resource managing unit at intervals which depend on the service type of the bit transfer session.

17. (Previously Presented) The telecommunication charging system according to claim 12 wherein said reception means is arranged to receive said information from the radio resource managing unit via an application server which relays said information from the radio resource managing unit to the charging logic.

18. (Previously Presented) The telecommunication charging system according to claim 12 wherein said reception means is arranged to receive said information from the radio resource managing unit via a mobile proxy which relays said information from the radio resource managing unit to the charging logic.

19. (Canceled)

20. (Previously Presented) The telecommunication charging system according to claim 12 wherein the charging server is arranged to determine that the charging rate related to the bit transfer session should be zero when the bandwidth on the wireless link available to the bit transfer session is below a predetermined threshold level.

21. (Previously Presented) The telecommunication charging system according to claim 12 is incorporated in a proxy node which further incorporates a mobile proxy.

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22. (Previously Presented) The telecommunication charging system according to claim 12 is incorporated in an application/service node which further incorporates an application logic.

23. (Previously Presented) The telecommunication charging system according to claim 12 is incorporated in a charging node, which is a node dedicated to charging functionality.

24. (Previously Presented) The telecommunication charging system according to claim 12 in that the charging server is arranged to adapt the charging rate related to the bit transfer session based on said received information from the radio resource managing unit such that the impact of said received information from the radio resource managing unit on the charging of the bit transfer session depends on a service type of the bit transfer session.

25 (Canceled)

Allowable Subject Matter

2. Claims 1-7, 9-10, 12-18, and 20-24 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Claims 1 and their dependents thereof, are allowed because the closes prior art, Clark et al. (US Patent Publication No. 2005/0086062) and Vasudevan et al. (US Patent Publication No. 2002/0131496), either alone or in combination, fails to anticipate or render obvious a method for determining a charging rate related to a data bit transfer session for a mobile client communicating with a radio resource managing unit comprising the steps of:

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dynamically determining a bandwidth on the wireless communication link available to and allowed to be used by the bit transfer session for said mobile client;

a charging logic receiving information from the radio resource managing unit about the bandwidth on the wireless communication link that the bit transfer session is available to use; and

said charging logic applying a particular charging rate for said mobile client based on said received bandwidth information for said data bit transfer session wherein the charging logic adapting the charging rate related to the bit transfer session such that the session is charged according to a first charging rate associated with a first charging class when the bandwidth on the wireless link available to the bit transfer session is within a first predetermined interval and according to a second charging rate associated with a second charging class when the bandwidth on the wireless link available to the bit transfer session is within a second predetermined interval.

Specifically, Clark and Vasudevan, either alone or in combination, fails to anticipate or render obvious dynamically determining a bandwidth on the wireless communication link available to and allowed to be used by the bit transfer session for mobile client and a charging logic applying a particular charging rate for mobile client based on received bandwidth information for said data bit transfer session wherein bandwidth information has been dynamically determined on the bit transfer session.

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Claims 12 and their dependents thereof, are allowed because the closes prior art, Clark and Vasudevan, either alone or in combination, fails to anticipate or render obvious A telecommunications charging system associated with a mobile client communicating with a radio resource managing unit over a wireless communication link within a telecommunication network system, comprising:

means for dynamically determining a bandwidth available for and allowed to be used by a particular data bit transfer session established between said mobile client and said radio resource managing unit over said wireless communication link;

reception means for receiving information from the radio resource managing unit about the bandwidth on the wireless link available for the bit transfer session; and charging server for applying a particular charging rate for said mobile client based on said received bandwidth information for the bit transfer session wherein the charging server is arranged to adapt the charging rate related to the bit transfer session such that the session is charged according to a first charging rate associated with a first charging class when the bandwidth on the wireless link available to the bit transfer session is within a first predetermined interval and according to a second charging rate associated with a second charging class when the bandwidth on the wireless link available to the bit transfer session is within a second predetermined interval.

Specifically, Clark and Vasudevan, either alone or in combination, fails to anticipate or render obvious means for dynamically determining a bandwidth on the wireless communication link available to and allowed to be used by the bit transfer session for mobile client and a charging logic applying a particular charging rate for mobile client based on received bandwidth

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information for said data bit transfer session wherein bandwidth information has been dynamically determined on the bit transfer session.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/
Examiner, Art Unit 2617

/AJIT PATEL/
Primary Examiner, Art Unit 2617